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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE 1077 Thomas P. Donahue 4420-1 01/11/2001 09/759,089 EXAMINER 09/29/2005 25235 7590 **HOGAN & HARTSON LLP** LAZARO, DAVID R ONE TABOR CENTER, SUITE 1500 ART UNIT PAPER NUMBER 1200 SEVENTEENTH ST DENVER, CO. 80202 2155

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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1	Application No.	Applicant(s)	
Office Action Summary	09/759,089	DONAHUE, THOMAS P.	
	Examiner	Art Unit	
	David Lazaro	2155	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).			
Status			
1)⊠ Responsive to communication(s) filed on <u>12 July 2005</u> .			
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This	a) ☐ This action is <b>FINAL</b> . 2b) ☑ This action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is			
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.			
Disposition of Claims			
4) Claim(s) <u>1-4,6-10, 12-15,17-36,38-59 and 61-68</u> is/are pending in the application.			
4a) Of the above claim(s) is/are withdrawn from consideration.			
5) Claim(s) is/are allowed.			
6) Claim(s) 1-4,6-10,12-15,17-36,38-59 and 61-68 is/are rejected.			
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.			
Application Papers			
9) The specification is objected to by the Examiner.			
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).			
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.			
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:			
1. Certified copies of the priority documents have been received.			
2. Certified copies of the priority documents have been received in Application No			
3. Copies of the certified copies of the priority documents have been received in this National Stage			
application from the International Bureau (PCT Rule 17.2(a)).			
* See the attached detailed Office action for a list of the certified copies not received.			
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview Sum	mary (PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date			
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Motice of Inform 6) Other:	mal Patent Application (PTO-152)	
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#### **DETAILED ACTION**

1. This office action is in response to the RCE filed 07/12/05.

- 2. Claims 1, 34 and 55 were amended.
- 3. Claims 65-68 were added.
- 4. Claims 5, 11, 16, 37 and 60 are canceled.
- 5. Claims 1-4, 6-10, 12-15, 17-36, 38-59 and 61-68 are pending in this office action.

### Response to Amendment

- 6. Applicant's arguments filed 7/12/05 have been fully considered but they are not persuasive. See 'Response to Arguments'.
- 7. The rejection of Claim 1 under 35 U.S.C. 112, first paragraph, is withdrawn.
- 8. The rejection of Claim 1 and 34 under 35 U.S.C. 112, second paragraph, is withdrawn.
- 9. The remaining grounds of rejection are respectfully maintained as set forth in the office action mailed 04/12/05.

# Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 11. Claim 1 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. Claim 1 recites the limitation "the preselected criterion" in line 8. There is insufficient antecedent basis for this limitation in the claim.

#### Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 14. Claims 34-35, 38-39, 44, 47-50, 52-55, 57, 58 and 61-64 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,266,664 by Russell-Falla et al. (Russell-Falla).
- 15. With respect to Claim 34, Russell-Falla teaches a method for monitoring and maintaining an acceptable use policy for computer network usage (Col. 1 lines 26-34) comprising:

capturing data on a network (Col. 4 line 61 – Col. 5 line 4) wherein the data comprises multiple half sessions of TCP/IP communications (It is inherent that any network communication data on a network such as the Internet/Web -Col. 4 line 61 - Col. 5 line 21 and Col. 1 lines 37-45 - would comprise multiple half sessions of TCP/IP communications); removing data content that does not contain language elements (Col. 5 lines 5-11);

testing the remaining content for the presence of predetermined expressions (Col. 5 lines 5-11) wherein the predetermined expressions comprise two or more categories (Col. 4 lines 45-60 and Col. 9 lines 9-12) each containing predetermined expressions that are defined by a user (Col. 4 lines 4-13 and Col. 6 lines 49-64 and Col. 7 lines 16-29);

maintaining a sum of values associated with said predetermined expressions found within at least one category (Col. 3 line 65 – Col. 4 line 3);

storing the remaining data if the sum of values associated with said predetermined expressions within a category meets or exceeds a threshold value (Col. 5 lines 47-64 and Col. 6 lines 29-34).

- 16. With respect to Claim 35, Russell-Falla teaches all the limitations of Claim 34 and further teaches the computer network is a wide area network (Col. 1 lines 37-45 of Russell-Falla).
- 17. With respect to Claim 38, Russell-Falla teaches all the limitations of Claim 34 and further teaches said expressions are weighted (Col. 3 lines 55-67 of Russell-Falla).
- 18. With respect to Claim 39, Russell-Falla teaches all the limitations of Claim 38 and further teaches said expressions are weighted with either positive or negative values (Col. 3 line 60 Col. 4 line 3 of Russell-Falla).
- 19. With respect to Claim 44, Russell-Falla teaches all the limitations of Claim 34 and further teaches said expressions are regular expressions (Col. 3 lines 1-6 of Russell-Falla).
- 20. With respect to Claim 47, Russell-Falla teaches all the limitations of Claim 35 and further teaches said threshold value for a category is variable (Col. 5 lines 47-63 of Russell-Falla).

- 21. With respect to Claim 48, Russell-Falla teaches all the limitations of Claim 48 and further teaches outputting a report relating to the presence of predetermined expressions (Col. 6 lines 29-34 of Russell-Falla).
- 22. With respect to Claim 49, Russell-Falla teaches all the limitations of Claim 48 and further teaches said report identifies individuals whose use of the computer network included communications which matched predetermined expressions (Col. 6 line 29-34, note the functionality of the report in Russell-Falla is tied to a user Col. 6 lines 15-21 of Russell-Falla).
- 23. With respect to Claim 50, Russell-Falla teaches all the limitations of Claim 48 and further teaches said report identifies network addresses where communications were received or originated that included matched predetermined expressions (Col. 6 lines 29-34 of Russell-Falla).
- 24. With respect to Claim 52, Russell-Falla teaches all the limitations of Claim 50 and further teaches said report is in a graphical format (Col. 9 lines 1-8 of Russell-Falla).
- 25. With respect to Claim 53, Russell-Falla teaches all the limitations of Claim 48 and further teaches said report provides the text of all communications that match said preselected criterion (Col. 6 lines 29-34 of Russell-Falla).
- 26. With respect to Claim 54, Russell-Falla teaches all the limitations of Claim 48 and further teaches said report is human readable format (Col. 6 lines 29-34 of Russell-Falla).
- 27. With respect to Claim 55, Russell-Falla teaches a method for monitoring and maintaining an acceptable use policy for computer network usage (Col. 1 lines 26-34) comprising:

capturing TCP/IP data on a network (Col. 4 line 61 - Col. 5 line 4);

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removing data content that does not contain language elements (Col. 5 lines 5-11); defining categories (Col. 4 lines 45-67) with weighted predetermined expressions (Col. 3 lines 36-51) wherein the predetermined expressions are defined by a user (Col. 4 lines 4-13 and Col. 6 lines 49-64 and Col. 7 lines 16-29);

testing the remaining content for the presence of predetermined expressions (Col. 5 lines 5-11);

maintaining a sum of values associated with said predetermined expressions found within each category (Col. 3 line 65 – Col. 4 line 3);

storing the remaining data if the sum of values associated with said predetermined expressions present within a category exceeds a threshold value (Col. 5 lines 47-64 and Col. 6 lines 29-34).

- 28. With respect to Claim 57, Russell-Falla teaches all the limitations of Claim 55 and further teaches the threshold value for a category is defined as the presence of no predetermined expressions (Col. 5 lines 47-64).
- 29. With respect to Claim 58, Russell-Falla teaches all the limitations of Claim 55 and further teaches the computer network is a wide area network (Col. 1 lines 37-45).
- 30. With respect to Claim 61, Russell-Falla teaches all the limitations of Claim 55 and further teaches outputting a report relating to the presence of predetermined expressions whose sum meets or exceed the threshold value of a category (Col. 6 lines 29-34).
- 31. With respect to Claim 62, Russell-Falla teaches all the limitations of Claim 61 and further teaches said report identifies individuals whose use of the computer network included communications which contained predetermined expressions whose sum matched

or exceeded the threshold value of at least one category (Col. 6 line 29-34, note the functionality of the report in Russell-Falla is tied to a user - Col. 6 lines 15-21).

- 32. With respect to Claim 63, Russell-Falla teaches all the limitations of Claim 61 and further teaches said report identifies network addresses where communications were received or originated that included predetermined expressions whose sum matched or exceeded the threshold value of at least one category (Col. 6 line 29-34).
- With respect to Claim 64, Russell-Falla teaches all the limitations of Claim 63 and further teaches said report is in a graphical format (Col. 6 lines 29-34 and Col. 9 lines 1-8).

### Claim Rejections - 35 USC § 103

- 34. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 35. Claims 1-4, 6, 7, 11-13, 15-21, 23, 27-29, 32, 33 and 65-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,266,664 by Russell-Falla et al. (Russell-Falla) in view of U.S. Patent 6,453,345 by Trcka et al. (Trcka).
- 36. With respect to Claim 1, Russell-Falla teaches in a computer network, a method of maintaining an acceptable use policy (Col. 1 lines 26-34) comprising: monitoring TCP/IP network communications wherein each network communication comprises multiple half sessions (It is inherent that any network communication data on a network such as the Internet/Web -Col. 4 line 61 Col. 5 line 21 and Col. 1 lines 37-45 would comprise multiple half sessions of TCP/IP communications); storing at least some of said half sessions (Col. 5

line 1-4); testing the stored communication for the presence of at least one preselected criterion (Col. 5 lines 5-12), wherein the preselected criterion is defined by a user (Col. 4 lines 4-13 and Col. 6 lines 49-64 and Col. 7 lines 16-29); deleting the communication if the presence of said at least one preselected criterion is not determined (it is inherent that the communication will be forwarded to the web browser and deleted from testing function of the proxy server when the presence is not determined – Col. 5 lines 1-14 and lines 47-65); and storing the communication if the presence of said at least one preselected criterion is determined (Col. 6 lines 29-34 and Col. 9 lines 1-8).

Russell-Falla does not explicitly disclose storing half sessions on disk even when the communication does not conform to a known protocol. Trcka teaches monitoring and capturing all raw network data packets (Col. 6 lines 1-25). Since all raw network data packets are captured, this would include those of unknown protocol. These raw network data packets are stored on disk (Col. 7 lines 13-27). By capturing raw network data packets, the invention of Trcka is capable of monitoring network communications at any network layer including any protocol functioning at that layer (Col. 7 lines 28-41, Col. 7 line 49 - Col. 8 line 4 and Col. 18 lines 15-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Russell-Falla and modify it as indicated by Trcka such that the method further comprises storing at least some of said half sessions on disk, even when the communication does not conform to a known protocol. One would be motivated to have this, as it beneficial to network analysis and troubleshooting tasks and is further advantageous over existing network security systems (Col. 1 line 41 - Col. 2 line 9 and Col. 2 lines 49-65 of Trcka).

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37. With respect to Claim 2, Russell-Falla in view of Trcka teaches all the limitations of Claim 1 and further teaches the preselected criterion comprises one or more subject matter categories (Col. 4 lines 45-60 of Russell-Falla).

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- 38. With respect to Claim 3, Russell-Falla in view of Trcka teaches all the limitations of Claim 2 and further teaches at least some of said subject matter categories comprise regular expressions (Col. 3 lines 1-5 of Russell-Falla).
- 39. With respect to Claim 4, Russell-Falla in view of Trcka teaches all the limitations of Claim 3 and further teaches said regular expressions are weighted (Col. 3 lines 1-9 of Russell-Falla).
- 40. With respect to Claim 6, Russell-Falla in view of Trcka teaches all the limitations of Claim 2 and further teaches the preselected criterion is weighted (Col. 3 lines 1-9 of Russell-Falla).
- 41. With respect to Claim 7, Russell-Falla in view of Trcka teaches all the limitations of Claim 4 and further teaches said regular expressions are weighted with either positive or negative values (Col. 3 line 60 Col. 4 line 3 of Russell-Falla).
- 42. With respect to Claim 12, Russell-Falla in view of Trcka teaches all the limitations of Claim 1 and further teaches the computer network is a wide area network (Col. 1 lines 37-45 of Russell-Falla).
- With respect to Claim 13, Russell-Falla in view of Trcka teaches all the limitations of Claim 1 and further teaches the computer network is a local area network (Col. 5 lines 50-67 of Trcka).

- 44. With respect to Claim 15, Russell-Falla in view of Trcka teaches all the limitations of Claim 2 and further teaches said subject matter categories comprise key words (Col. 3 lines 1-9 of Russell-Falla).
- With respect to Claim 17, Russell-Falla in view of Trcka teaches all the limitations of Claim 2 and further teaches assigning a threshold value to each subject matter category (Col. 5 lines 47-64 of Russell-Falla).
- 46. With respect to Claim 18, Russell-Falla in view of Trcka teaches all the limitations of Claim 17 and further teaches at least some of said subject matter categories comprise one or more predetermined expressions (Col. 3 lines 36-51 of Russell-Falla).
- With respect to Claim 19, Russell-Falla in view of Trcka teaches all the limitations of Claim 18 and further teaches assigning a value to said predetermined expressions (Col. 3 lines 59-66 of Russell-Falla).
- 48. With respect to Claim 20, Russell-Falla in view of Trcka teaches all the limitations of Claim 19 and further teaches summing the values of said predetermined expressions (Col. 3 line 60 Col. 4 line 3 of Russell-Falla).
- 49. With respect to Claim 21, Russell-Falla in view of Trcka teaches all the limitations of Claim 20 and further teaches said communication is further stored if the sum of values of said predetermined expressions comprising a subject matter category equal or exceed the threshold value assigned to said subject matter category (Col. 5 lines 47-64 and Col. 6 lines 29-34 of Russell-Falla).
- 50. With respect to Claim 23, Russell-Falla in view of Trcka teaches all the limitations of Claim 21 and further teaches said threshold values assigned to said subject matter categories are variable (Col. 5 liens 47-64 of Russell-Falla).

- 51. With respect to Claim 27, Russell-Falla in view of Trcka teaches all the limitations of Claim 1 and further teaches outputting a report relating to the presence of said at least one preselected criterion (Col. 6 lines 29-34 of Russell-Falla).
- 52. With respect to Claim 28, Russell-Falla in view of Trcka teaches all the limitations of Claim 27 and further teaches said report identifies individuals whose use of the computer network included communications which matched preselected criterion (Col. 6 line 29-34, note the functionality of the report in Russell-Falla in view of Trcka is tied to a user Col. 6 lines 15-21 of Russell-Falla).
- 53. With respect to Claim 29, Russell-Falla in view of Trcka teaches all the limitations of Claim 27 and further teaches said report identifies network addresses where communications were received or originated that included matched preselected criterion (Col. 6 lines 29-34 of Russell-Falla).
- With respect to Claim 32, Russell-Falla in view of Trcka teaches all the limitations of Claim 27 and further teaches said report provides the text of all communications that match said preselected criterion (Col. 6 lines 29-34 of Russell-Falla).
- With respect to Claim 33, Russell-Falla in view of Trcka teaches all the limitations of Claim 27 and further teaches said report is human readable format (Col. 6 lines 29-34 of Russell-Falla).
- 56. With respect to Claim 65, Russell-Falla in view of Trcka teaches all the limitations of Claim 1 and further teaches wherein at least one stored half session comprises a plurality of independent parts, and the testing is performed individually on each independent part (In Trkca: Col. 12 line 65 Col. 13 line 49 and Col. 6 lines 1-25).

57. With respect to Claim 66, Russell-Falla in view of Trcka teaches all the limitations of Claim 65 and further teaches wherein the independent parts comprise individual emails (In Russell-Fall: Col. 8 lines 51-60) and (In Trcka: Col. 14 line 61 - Col. 15 line 9).

- 58. With respect to Claim 67, Russell-Falla in view of Trcka teaches all the limitations of Claim 65 and further teaches wherein the independent parts comprise message attachments (In Russell-Fall: Col. 8 lines 51-60) and (In Trcka: Col. 14 line 61 Col. 15 line 9).
- 59. Claims 30 and 31are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell-Falla in view of Trcka.
- 60. With respect to Claim 30, Russell-Falla in view of Trcka teaches all the limitations of Claim 2 and further teaches outputting a report relating to the presence of preselected criterion (Col. 6 lines 29-34 and Col. 9 lines 1-8 of Russell-Falla).

Russell-Falla in view of Trcka does not explicitly disclose the report identifying the number of matches in a category. However, it is implied by Russell-Falla in view of Trcka that the report would indicate the number matches in a category as suggested by the alternate embodiments which provide for filing references of the content of concern and storing a presentation schema (Col. 8 line 30 – Col. 9 line 15 of Russell-Falla). Furthermore, the reviewer such as the administrator (Col. 6 lines 29-34 of Russell-Falla) would need some indication as to the significance of the report in terms of evaluating the content.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Russell-Falla in view of Trcka and

modify it such that said report identifies the number of matches in a category. One would be motivated to have this as there is need for monitoring what persons such as employees access through a computer network (Col. 2 lines 24-44 of Russell-Falla).

- 61. With respect to Claim 31, Russell-Falla teaches all the limitations of Claim 30 and further teaches said report is in a graphical format (Col. 6 lines 29-34 and Col. 9 line 1-8 of Russell-Falla).
- 62. Claims 36, 51 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell-Falla.
- 63. With respect to Claim 36, Russell-Falla teaches all the limitations of Claim 34. While Russell-Falla does not explicitly state the computer network is a local area network, Russell-Falla does state the invention is well suited for monitoring those who have managerial responsibility for material accessed or retrieved by others such as employees (Col. 2 lines 30-36). This implies the computer network environment would include a local area network such as those associated with work environments.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Russell-Falla and modify it such that the computer network is a local area network. One would be motivated to have this as there is need for monitoring what persons such as employees access through a computer network (Col. 2 lines 24-44).

64. With respect to Claim 51, Russell-Falla teaches all the limitations of Claim 34 and further teaches outputting a report relating to the presence of predetermined expressions (Col. 6 lines 29-34 and Col. 9 lines 1-8).

Russell-Falla does not explicitly disclose the report identifying the number of matches in a category. However, it is implied by Russell-Falla that the report would indicate the number matches in a category as suggested by the alternate embodiments which provide for filing references of the content of concern and storing a presentation schema (Col. 8 line 30 – Col. 9 line 15). Furthermore, the reviewer such as the administrator (Col. 6 lines 29-34) would need some indication as to the significance of the report in terms of evaluating the content.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Russell-Falla and modify it such that said report identifies the number of matches in a category. One would be motivated to have this as there is need for monitoring what persons such as employees access through a computer network (Col. 2 lines 24-44).

65. With respect to Claim 59, Russell-Falla teaches all the limitations of Claim 55. While Russell-Falla does not explicitly state the computer network is a local area network, Russell-Falla does state the invention is well suited for monitoring those who have managerial responsibility for material accessed or retrieved by others such as employees (Col. 2 lines 30-36). This implies the computer network environment would include a local area network such as those associated with work environments.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Russell-Falla and modify it such that the computer network is a local area network. One would be motivated to have this as there is need for monitoring what persons such as employees access through a computer network (Col. 2 lines 24-44).

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- 66. Claims 8-10, 14, 22 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell-Falla in view of Trcka and in further view of U.S. Patent 6,366,910 by Rajaraman et al. (Rajaraman).
- 67. With respect to Claim 8, Russell-Falla in view of Trcka teaches all the limitations of Claim 7 but does not explicitly disclose regular expressions with negative values being before regular expressions with positive value. Rajaraman teaches regular expressions with negative values are before regular expression with positive values (Col. 7 lines 37-45 and Col. 9 lines 19-28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Russell-Falla in view of Trcka and modify it as indicated by Rajaraman such that regular expressions within a subject matter category having a negative value are before regular expressions having a positive value. This aids in accurately identifying the content by reducing irrelevant hits (Col. 7 lines 22-42 of Rajaraman). One would be motivated to have this as there is need for accurately and efficiently identifying a category for which content belongs (Col. 2 lines 19-56 of Russell-Falla).

68. With respect to Claim 9, Russell-Falla in view of Trcka teaches all the limitations of Claim 4 but does not explicitly disclose prioritizing the order which regular expressions within a subject matter category are tested. Rajaraman teaches prioritizing the order which regular expressions within a subject matter category are tested (Col. 9 lines 19-28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Russell-Falla in view of Trcka and modify it as

indicated by Rajaraman such that it further comprises prioritizing the order which regular expressions within a subject matter category are tested. This aids in accurately identifying the content by reducing irrelevant hits (Col. 7 lines 22-42 of Rajaraman). One would be motivated to have this as there is need for accurately and efficiently identifying a category for which content belongs (Col. 2 lines 19-56 of Russell-Falla).

- 69. With respect to Claim 10, Russell-Falla in view of Trcka and in further view of Rajaraman teaches all the limitations of Claim 9 and further teaches said prioritizing reduces likelihood of false hits (Col. 7 lines 22-42 of Rajaraman).
- 70. With respect to Claim 14, Russell-Falla in view of Trcka teaches all the limitations of Claim 2 and further teaches preselected criterion (Col. 3 lines 1-8) and a plurality of categories (Col. 4 lines 45-60).

Russell-Falla in view of Trcka does not explicitly disclose a presence being a match in a plurality of categories. Rajaraman teaches the presence being a match in a plurality of categories (Col. 10 lines 22-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Russell-Falla in view of Trcka and modify it as indicated by Rajaraman such that the presence of the preselected criterion in at least one of said categories comprises a match in a plurality of categories. One would be motivated to have this as there is need for accurately and efficiently identifying a category for which content belongs (Col. 2 lines 19-56 of Russell-Falla).

71. With respect to Claim 22, Russell-Falla in view of Trcka teaches all the limitations of Claim 21 and further teaches threshold values for subject matter categories (Col. 5 lines 47-63) and a plurality of subject matter categories (Col. 4 lines 45-60). Russell-Falla in view of

Trcka does not explicitly disclose a threshold for one category equaling or exceeding the threshold value in a plurality of categories. Rajaraman teaches a threshold for one category equaling or exceeding the threshold value in a plurality of categories (Col. 10 lines 22-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Russell-Falla in view of Trcka and modify it as indicated by Rajaraman such that the threshold value of at least one subject matter category comprises equaling or exceeding the threshold value in a plurality of categories. One would be motivated to have this as there is need for accurately and efficiently identifying a category for which content belongs (Col. 2 lines 19-56 of Russell-Falla).

72. With respect to Claim 24, Russell-Falla in view of Trcka teaches all the limitations of Claim 18 but does not explicitly disclose the subject matter categories having a hierarchical relationship. Rajaraman teaches that subject matter categories can have a hierarchical relationship (Col. 10 lines 22-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Russell-Falla in view of Trcka and modify it as indicated by Rajaraman such that said subject matter categories have a hierarchical relationship. One would be motivated to have this as there is need for accurately and efficiently identifying a category for which content belongs (Col. 2 lines 19-56 of Russell-Falla).

73. With respect to Claim 25, Russell-Falla in view of Trcka and in further view of Rajaraman teaches all the limitations of Claim 24 and further teaches said hierarchical relationship comprises defining the threshold value for at least one subject matter category

as the presence of predetermined expressions in a plurality of other subject matter categories (Col. 10 lines 22-34 of Rajaraman).

- 74. With respect to Claim 26, Russell-Falla in view of Trcka and in further view of Rajaraman teaches all the limitations of Claim 24 and further teaches said hierarchical relationship comprises defining the threshold value for at least one subject matter category as matching or exceeding the threshold value assigned to a plurality of other subject matter categories (Col. 10 lines 22-34 of Rajaraman).
- 75. Claims 40-43, 45, 46 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell-Falla in view of Rajaraman.
- 76. With respect to Claim 40, Russell-Falla teaches all the limitations of Claim 39 but does not explicitly disclose prioritizing the order which regular expressions within a subject matter category are tested. Rajaraman teaches prioritizing the order which regular expressions within a subject matter category are tested (Col. 9 lines 19-28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Russell-Falla and modify it as indicated by Rajaraman such that it further comprises prioritizing the order which regular expressions within a subject matter category are tested. This aids in accurately identifying the content by reducing irrelevant hits (Col. 7 lines 22-42 of Rajaraman). One would be motivated to have this as there is need for accurately and efficiently identifying a category for which content belongs (Col. 2 lines 19-56 of Russell-Falla).

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- 77. With respect to Claim 41, Russell-Falla in view of Rajaraman teaches all the limitations of Claim 40 and further teaches the negative values regular expressions are tested first (Col. 9 lines 19-28).
- 78. With respect to Claim 42, Russell-Falla in view of Rajaraman teaches all the limitations of Claim 41 and further teaches said negative and positive valued regular expressions are separately tested in the order of largest value to smallest value (Col. 9 lines 19-45).
- 79. With respect to Claim 43, Russell-Falla in view of Rajaraman teaches all the limitations of Claim 40 and further teaches said prioritizing is determined based upon reducing likelihood of false hits (Col. 7 lines 22-42 of Rajaraman).
- 80. With respect to Claim 45, Russell-Falla teaches all the limitations of Claim 21 and further teaches threshold values for categories (Col. 5 lines 47-63) and a plurality of categories (Col. 4 lines 45-60).

Russell-Falla does not explicitly disclose a threshold for one category meeting or exceeding the threshold value for a plurality of other categories. Rajaraman teaches a threshold for one category equaling or exceeding the threshold value in a plurality of categories (Col. 10 lines 22-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Russell-Falla and modify it as indicated by Rajaraman such that the threshold value for at least one category comprises meeting or exceeding the threshold value in a plurality of categories. One would be motivated to have this as there is need for accurately and efficiently identifying a category for which content belongs (Col. 2 lines 19-56 of Russell-Falla).

81. With respect to Claim 46, Russell-Falla teaches all the limitations of Claim 34 but does not explicitly disclose the threshold value of at least one category comprises meeting or exceeding the threshold value for at least one other category and not meeting or exceeding the threshold value for at least another category. Rajaraman teaches the threshold value of at least one category comprises meeting or exceeding the threshold value for at least one other category and not meeting or exceeding the threshold value for at least another category (Col. 10 lines 22-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Russell-Falla and modify it as indicated by Rajaraman such that the threshold value of at least one category comprises meeting or exceeding the threshold value for at least one other category and not meeting or exceeding the threshold value for at least another category. One would be motivated to have this as there is need for accurately and efficiently identifying a category for which content belongs (Col. 2 lines 19-56 of Russell-Falla).

82. With respect to Claim 56, Russell-Falla teaches all the limitations of Claim 21 and further remaining data being stored based on the sum of predetermined expressions (Col. 3 line 56 – Col. 4 line 3). Russell-Falla does not explicitly disclose storing of the remaining data occurring only if the sum of predetermined expressions exceeds the threshold value in a plurality of categories. Rajaraman teaches a threshold for a plurality of categories (Col. 10 lines 22-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Russell-Falla and modify it as indicated by Rajaraman such that said remaining data is stored only if the sum of predetermined

expressions exceeds the threshold value in a plurality of categories. One would be motivated to have this as there is need for accurately and efficiently identifying a category for which content belongs (Col. 2 lines 19-56 of Russell-Falla).

- 83. Claim 68 is rejected under 35 U.S.C. 103(a) as being unpatentable over Russell-Falla in view of Trcka as applied to claim 1 above, and further in view of U.S. Patent 5,850,388 by Anderson et al. (Anderson).
- 84. With respect to Claim 68, Russell-Falla in view of Trcka teaches all the limitations of Claim 1 but does not explicitly disclose prior to testing, attempting to identify a protocol by comparing the stored half session with known protocol patterns. Anderson teaches identifying a protocol by comparing an unknown protocol with known protocol patterns.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Russell-Falla in view of Trcka and modify it as indicated by Anderson such that the method further comprises prior to testing, attempting to identify a protocol by comparing the stored half session with known protocol patterns. One would be motivated to have this, as it is desired for effective analysis and monitoring of network performance (In Anderson: Col. 3 line 2-16 and Col. 4 lines 1-11).

## Response to Arguments

85. Applicant's arguments filed 7/12/05 have been fully considered but they are not persuasive.

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86. Applicant argues - "Russell-Falla does not suggest any means by which the user can define expressions for use in testing as called for in original claim 16 and now in claim 34."

- a. The examiner considers the manual classification of training data that ultimately determines the contents of database 30 (Col. 4 lines 4-13 and Col. 6 lines 49-64 and Col. 7 lines 16-29) to be sufficiently within the scope of "predetermined expressions that are defined by a user". Based on the broadest reasonable interpretation, the act of the user selecting training data and classifying it, is an act of the user defining the predetermined expressions.
- 87. Applicant argues "The Office action cites a portion of Russell-Falla that relates to scanning an HTML page for regular expressions. It appears that the entire HTML page is used as input for analysis, including non-language elements. Russell- Falla does not show or suggest any activity of removing data content that does not contain language elements."
  - b. By scanning for regular expressions, the non-language elements are separated from the non-language elements. Hence, Russell-Falla teaches "removing data content that does not contain language-elements".
- 88. Applicant argues "Further, the Russell-Falla reference does not show or fairly suggest capturing data on a network comprising multiple half sessions of TCP/IP network communications...piggy backed data is not a part of the HTML page in Russell-Falla, but it is a part of the captured half session in claim 34. Hence, this data will escape analysis in Russell-Falla, but will be subject to monitoring by the invention of claim 34."

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c. Claim 34 states in part, "capturing data on a network, wherein the data comprises multiple half sessions". The proxy software disclosed by Russell-Falla analyzes a requested HTML page that is transmitted over the network (Col. 4 lin 61 - Col. 5 line 4). The HTML page is sent as data over the network, and the proxy software intercepts such data in order to analyze the request page. The examiner considers this to be sufficiently within the scope of "capturing data on a network". Furthermore, as the network includes the Internet/World Wide Web (Col. 4 line 61 - Col. 5 line 21 and Col. 1 lines 37-45), the HTML page data will be transmitted based on TCP/IP and will thus inherently include multiple half sessions. Therefore, Russell-Falla teaches "capturing data on a network, wherein the data comprises multiple half sessions".

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89. Applicant argues - "Russell-Falla does not show or suggest the use of categories nor maintaining a sum of values on a category basis as called for in claim 34. The amendments to claim 34 are believed to clarify the use of multiple categories in claim 34. The Office action asserts that Russell-Falla does not prohibit multiple categories. However, this is far different from actually teaching multiple categories and the particular act of maintaining a sum of values on a category basis called for in claim 34. Russell-Falla must positively teach, not just fail to prohibit, this feature of claim 34 to form a rejection under 35 U.S.C. 102. For at least these reasons claim 34 is allowable over Russell Falla."

And also "These features of claim 55 are not shown or suggested in the relied on reference. As noted hereinbefore and admitted in the Office action, Russell-Falla does not teach plural categories. Applicant maintains the position that Russell-Falla teaches away from using multiple categories. Moreover, if one were to modify Russell-Falla as suggested in the Office action, one might, by happenstance or invention, come up with

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the solution called for in claim 55. However, that solution is not taught or suggested by the reference itself."

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- d. The overall point of the examiner's response was that Russell-Falla states multiple categories (Col. 4 lines 45-60) and does not give any indication that analysis according to one category would prohibit the analysis according to another.

  Nowhere in Russell-Falla, is there an indication or suggestion that one making and using the invention of Russell-Fall would be restricted to analysis and detection of content in only one category. Based on the teachings and most importantly, the underlying principles of the invention (Col. 9 lines 9-12) of Russell-Falla, one of ordinary skill in the art would easily understand and anticipate that the analysis and detection process disclosed by Russell-Falla could be repeated on the same set of data for any selected category. Obviously, if one is concerned about the various forms of data that can be encountered in a information network environment (Col. 2 lines 24-36), then one would not restrict or limit the detection process to a single form (a single category).
- e. In regards to the "maintaining a sum of values", Col. 3 line 65 Col. 4 line 3 states in part, "Thus, when the <u>weightings are summed</u> in calculating a rating of a page, the higher the value the more likely the page meets the selected criterion."(emphasis added). It is clear that each stated category (Col. 4 lines 45-60) has predetermined expressions and corresponding weightings. For these reasons, the Applicants arguments are not persuasive.
- f. Furthermore, the previous office actions do not admit that Russell-Falla does not teach plural categories.

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90. Applicant argues - "Further, claim 1 calls for storing the communication in a conditional manner, "if the presence of at least one preselected criterion is determined." Trcka teaches that all raw data packets are stored, not a process of storing some and deleting some as called for in claim 1. Russell-Falla does not explicitly teach storing any of the communication. Accordingly, the combination of Russell-Falla and Trcka does not suggest the invention of claim 1."

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- g. In Trcka all raw packets are initially stored. The functionality of Trcka is related to firewall security (Col. 13 lines 1-49 and Col. 19 lines 23-44). As such, based on the analysis of the packet, the packet may be filtered out/rejected or passed on to the subsequent destination. This is storing of the communication ins a conditional manner. Russell-Falla inherently teaches a conditional storing of communication (Col. 4 line 61 Col. 5 line 35 and Co. 6 lines 16-34). It would be impossible to perform the operations taught by Russell-Falla without storing the communication is some manner.
- 91. Applicant argues "Russell-Falla must analyze HTML pages, not network packets, whereas Trcka must capture network packets at a very low level. The two references, as taught in the references themselves, describe incompatible systems."
  - h. Applicant provides no factual evidence as to how the combination of Russell-Falla and Trcka would be incompatible. Furthermore, In re Keller, Terry, and Davies, (208 USPQ 871 (CCPA 1981)), states, ""Test of obviousness is not whether features of secondary reference may be bodily incorporated into primary reference's structure, nor whether claimed invention is expressly suggested in any one or all of references; rather, test is what combined teachings of references would have suggested to those of ordinary skill in art."

#### Conclusion

92. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- 93. U.S. Patent 6,633,855 by Auvenshine "Method, system, and program for filtering content using neural networks" October 14, 2003. Discloses filter of network packets for content deemed unacceptable by a user.
- 94. U.S. Patent 6,148,336 by Thomas et al. "Ordering of multiple plugin applications using extensible layered service provider with network traffic filtering" November 14, 2000. Discloses filtering of undesired content through the use of plugin applications associated with the TCP/IP stack.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 571-272-3986. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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David Lazaro

September 26, 2005

SALEH NAJJAR SIMARY EXAMINED